

**Before the  
UNITED STATES  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C.**

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In the Matter of:	)	GN Docket No. 14-166
	)	
Promoting Spectrum Access for	)	
Wireless Microphone Operations	)	
	)	
Amendment of Part 15 of the Commission’s	)	ET Docket No. 14-165
Rules for Unlicensed Operations in the	)	
Television Bands, Repurposed 600 MHz	)	
Band, 600 MHz Guard Bands and Duplex	)	
Gap, and Channel 37, and	)	
	)	
Amendment of Part 74 of the Commission’s	)	
Rules for Low Power Auxiliary Stations in	)	
the Repurposed 600 MHz Band and 600	)	
MHz Duplex Gap	)	
	)	
Expanding the Economic and Innovation	)	GN Docket No. 12-268
Opportunities of Spectrum Through	)	
Incentive Auctions	)	
_____	)	Submitted October 2, 2017

**COMMENTS OF THE RECORDING ACADEMY**

**I. Introduction**

The Recording Academy is pleased to submit comments in response to the Federal Communications Commission’s Further Notice of Proposed Rule Making, “Promoting Spectrum Access for Wireless Microphone Operations.” The Recording Academy represents more than 17,000 individual music creators and professionals—songwriters, performers, studio professionals, and others creatively involved in making music. The membership also includes a Producers & Engineers Wing that advises the Academy on technical matters related to the art

and craft of recorded music and other matters of concern to producers, engineers, remixers, manufacturers, technologists, and related professionals.

Wireless microphones, wireless instruments, in-ear monitors, cue and control devices, and wireless intercoms (collectively referred to as “wireless microphones”) are vital tools for live performers and are an essential technology for high-quality professional concerts, performances, and other live musical events. While wireless microphones and instruments provide amplification, freedom of movement, and the superior experience that performers and fans alike have come to expect, the use of in-ear monitors, cue and control devices, and wireless intercoms are necessary for the health and safety of those involved in the performance. Performers increasingly rely on in-ear monitors to protect their hearing, while stage managers and production crew rely on intercoms to safely coordinate sound, lighting, effects, and backstage movement. Accordingly, the Recording Academy strongly supports the Commission’s proposal to expand part 74 Low Power Auxiliary Stations (LPAS) licensing eligibility for venues, sound companies, and other qualified entities that demonstrate the need and capability for producing professional performances with high-quality audio.

## **II. Limitations of Existing Regulation**

Over the last several years, wireless microphone users have faced a constantly shifting climate for spectrum access. At the start of the decade, many organizations, venues, and companies were forced to invest in new equipment at great expense when they were required to vacate the 700 MHz band.<sup>1</sup> Most recently, the effects of the incentive auction have relegated wireless microphone users to an even more limited range of available and usable spectrum.

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<sup>1</sup> *Revisions to Rules Authorizing the Operation of Low Power Auxiliary Stations in the 698-806 MHz Band*, WT Docket No. 08-166 (2010).

Mindful of these past and current changes, the Recording Academy has submitted comments and conducted advocacy in the past urging the Commission to protect the use of wireless microphones for recording professionals, producers, and touring sound companies.<sup>2</sup>

As the post-incentive auction transition gets underway, it is critical to protect professional and high-quality wireless microphone users. With less available spectrum, the likelihood of disruption and interference has increased at performance venues across the country. The repack has forced the elimination of the two reserved wireless microphone channels in every market and television broadcasters are relocating into channels previously accessible to unlicensed users. Apart from the proposal for expanded licensing, professional wireless microphone users who do not meet the current 50-channel threshold, many of whom only recently purchased all new equipment, will not have access to any guaranteed alternatives for interference-free spectrum.

Additionally, wireless microphone users will be subject to greater vulnerabilities as new white space devices penetrate the market to deliver consumer communications and connectivity solutions.<sup>3</sup> An increase in unlicensed devices accessing the limited spectrum will cause operability problems for all unlicensed users—live performances will be competing with personal devices and vice versa in a spectrally inefficient manner. The Recording Academy is supportive of white space devices and their applications, and believes that the FNPRM is complimentary to the expansion and deployment of new white space devices and technologies.

Additionally, current FCC rules do not reflect the practices of wireless microphone users in the live music industry. As unanimously agreed upon by the Commissioners, the existing rule

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<sup>2</sup> See, “Comments by the Recording Academy: Protection of Wireless Microphone Systems.” WT Docket Nos. 08-166, 08-167; ET Docket No. 10-24. (filed March, 2010); “Letter from the Recording Academy to Chairman Wheeler” WT Docket Nos. 08-166, 08-167, 10-24; GN 12-268 (Sent May, 2014).

<sup>3</sup> *A rural broadband strategy: connecting rural America to new opportunities*. Microsoft Corporation. (June 2017).

limiting licensing eligibility for a Part 74 license to entities that regularly use at least 50 wireless microphones is arbitrary and unsupported by any study.<sup>4</sup> This prerequisite is also not reflective of the needs of the music industry. Apart from stadium tours, large music festivals or fixed, Vegas-style productions, most music venues and performances do not routinely use 50 or more wireless microphones and thus are ineligible to benefit from the protection of a Part 74 license. And with no industry standard—depending on the scope of the production, a performance could require 40 microphones, or 30, or 10—any quantifiable metric would be insufficient for the industry’s needs.

### **III. Proposed Expansion of Part 74 LPAS Rules**

The Recording Academy supports expanding the part 74 Low Power Auxiliary Stations (LPAS) rules by enacting the Commission’s proposal to include a two-part test that demonstrates an event or production’s need for, and capability to produce, professional and high-quality audio. The Recording Academy also supports the Commission’s proposed case-by-case licensing approach as the best method of processing Part 74 applicants. The FCC’s proposal will ensure better and more efficient spectrum use by both licensed and unlicensed users, benefiting the public at-large, municipalities, and the professional arts community.

As discussed, in the music industry there is no standard number of wireless microphones used for any given performance. Thus, the merit-based requirements outlined in the FCC’s proposed two-part test is the best approach to ensure that users who apply for, and receive, a Part 74 license are professional, qualified, and spectrally efficient. At a minimum, applicants should demonstrate that the venue, organization, and/or performance is of professional-caliber—for the

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<sup>4</sup> Remarks by Chairman Pai, Commissioner Clyburn, and Commissioner O’Rielly. FCC Open Commission Hearing. (July 13, 2017).

music industry this could entail some combination of factors such as whether the act is performed in front of a public audience, a venue's show calendar, a sound company's experience, and if the performer is a member of a professional service organization.<sup>5</sup>

Additionally, applicants should be required to have qualified, trained staff or a contracted vendor who can manage and coordinate radio-frequencies on-site—such as an individual with professional experience in sound engineering, relevant degrees/certifications, and/or membership in a professional organization. The Commission could also host educational and training opportunities for individuals to demonstrate their qualifications. The Recording Academy looks forward to working with the Commission to develop best practices.

Applicants should also be reviewed, and licenses granted, on a case-by-case basis. The only manner to effectively determine professional need and technical competence is to review each applicant on their own individual merits—there is no appropriate singular quantifiable metric to process licenses. To ensure applications are processed in a time-efficient manner, the Recording Academy would also support the FCC requiring applicants to certify that they will meet the commission's two-part test and adhere to the requirements of its license. If an applicant certifies when, where, and why they need protection—demonstrating professional capabilities and high-quality audio needs—then applications could be reviewed in an efficient manner. Additionally, a certification process would discourage non-professional events and venues from applying for a Part 74 license, creating a clearer distinction between professional-level productions and amateur events, while establishing spectrally efficient practices.

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<sup>5</sup> Examples include American Federation of Musicians (AFM), Recording Academy, Screen Actors Guild-American Federation of Television and Radio Artists (SAG-AFTRA).

Lastly, the Recording Academy believes that expanding licensing eligibility will help ensure that spectrum is shared effectively; benefitting, not hindering, unlicensed use from other white space devices. Wireless microphones have a fixed location and predetermined usage time—the venue and performance period— providing reliable, predictable and valuable data to other spectrum users. A robust database of licensed wireless microphone users will thus enable unlicensed white space devices to adjust and coordinate accordingly, while ensuring these unlicensed technologies avoid potential interference.

#### **IV. Conclusion**

Live music is integral to American culture and generates billions of dollars in economic activity. Millions of Americans enjoy concerts, festivals and other music productions at venues across the country. The audience's enjoyment of the performance, and the safety of the performers, rely on wireless microphone technologies. Wireless microphone devices not only provide a professional and high-quality audio experience, but also enable essential backstage communications and protect the health of the performers; in many ways, wireless microphones are the backbone of the live music industry. As such, the Recording Academy strongly endorses the Commission's proposal to expand part 74 LPAS rules to accommodate venues and professional sound companies that use less than 50 wireless microphones. The proposal is a much-needed solution that benefits the music and arts community as well as the many new and emerging unlicensed white space technologies. The Recording Academy looks forward to working with the Commission to implement this rule and identify best practices.

Respectfully Submitted,

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